STIC Search Report
EIC 3700

STIC Database Tracking Number: 148218

TO:	From:
Linda Sholl **Location: RND 8a31** **Art Unit: 3700** **Monday, March 21, 2005** **Case Serial Number: 10/678052**	**Terry Solomon** **Location: EIC 3700** **RND 8b31** **Phone: 272-3509** **terrance.solomon@uspto.gov**

Search Notes

No current or past litigation found involving US pat. 5741120.

Sources:

Lexis/Nexis
Questel-Orbit

Time of Request: March 18, 2005 01:14 PM EST

Research Information:

Utility, Design and Plant Patents
patno=5741120

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

5741120

April 21, 1998

Capacity modulated scroll machine

REISSUE: September 30, 2003 - Reissue Application filed Ex. Gp.: 3746; Re. S.N. 10/678,052 (O.G. December 16, 2003).

CERT-CORRECTION: September 1, 1998 - a Certificate of Correction was issued for this patent

APPL-NO: 486118 (08)

FILED-DATE: June 7, 1995

GRANTED-DATE: April 21, 1998

ASSIGNEE-AT-ISSUE: Copeland Corporation, Sidney, Ohio, United States (US), 02

ASSIGNEE-AFTER-ISSUE: August 22, 1995 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., COPELAND CORPORATION CAMPBELL ROAD SIDNEY OHIO 45365, Reel and Frame Number: 07601/0655

LEGAL-REP: Harness, Dickey & Pierce, PC.

Selected file: PLUSPAT

Comprehensive Worldwide Patents database

**** SS 1: Results 1**
PRT SS 1 MAX 1 LEGALALL

1 / 1 PLUSPAT - ©QUESTEL-ORBIT - image

Patent Number :
US5741120 A 19980421 [US5741120]

Title :
(A) Capacity modulated scroll machine

Patent Assignee :
(A) COPELAND CORP (US)

Patent Assignee :
Copeland Corporation, Sidney OH [US]

Inventor(s) :
(A) BASS MARK (US); DOEPKER ROY J (US); WARNER WAYNE R (US); CAILLAT JEAN-LUC M (US)

Application Nbr :
US48611895 19950607 [1995US-0486118]

Priority Details :
US48611895 19950607 [1995US-0486118]

Intl Patent Class :
(A) F04B-049/00

EPO ECLA Class :
F04C-027/00C
F04C-029/10B2
F04C-029/10C2B
F04C-029/10F
F04C-029/10K

US Patent Class :
ORIGINAL (O) : 417044200; CROSS-REFERENCE (X) : 417214000 418055500

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US4505651; US4575318; US4610610; US4774816; US4846633; US5263822; US5290161; US5336058; US5342185; US5342186; US5411384; US5435707; JP59-117895

Publication Stage :
(A) United States patent

Abstract :
A scroll-type machine is disclosed which is particularly well suited for use as a compressor in refrigeration and air conditioning systems and incorporates a unique arrangement for modulating the capacity thereof. In one group of embodiments the capacity of the scroll-type machine is modulated by relative axial movement between the scroll members so as to form a leakage path across the wrap tips and opposed end plates. In another group of embodiments, modulation is achieved by reducing the orbital radius of one of the scroll members to thereby form a leakage path across the flank surfaces of the wraps. Both types of scroll separation may be accomplished in a time pulsed manner to thereby enable a full range of modulation with the duration of the loading and unloading periods being selected to maximize the efficiency of the overall system. A motor control arrangement is also disclosed which may be used with either of the modulation methods mentioned above to increase the efficiency of the motor during periods of reduced load. Additionally, either of the modulation arrangements mentioned above may be combined with a delayed suction form of capacity modulation with or without the motor control feature to thereby achieve better operating efficiency under certain conditions.

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Patent Number :
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19950822 US/AS02-A
ASSIGNMENT OF ASSIGNOR'S INTEREST
OWNER: COPELAND CORPORATION CAMPBELL ROAD SIDNEY, OHIO 45; EFFECTIVE DATE: 19950815

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OWNER: BASS, MARK; EFFECTIVE DATE: 19950815

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OWNER: DOEPKER, ROY J.; EFFECTIVE DATE: 19950815

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OWNER: CAILLAT, JEAN-LUC M.; EFFECTIVE DATE: 19950815

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OWNER: WARNER, WAYNE R.; EFFECTIVE DATE: 19950815

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CERTIFICATE OF CORRECTION

20031216 US/RF-A
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Update Code :
2004-03

1 / 1 CRXX - ©CLAIMS/RRX
Patent Number :
5,741,120 A 19980421 [US5741120]
Patent Assignee :
Copeland Corp
Actions :
20030930 REISSUE REQUESTED
ISSUE DATE OF O.G.: 20031216
REISSUE REQUEST NUMBER: 10/678052
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 3746

Reissue Patent Number:

Session finished: 18 MAR 2005 Time 20:22:18
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